

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/900,063C
Source: IFW/b
Date Processed by STIC: 4/17/06

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 09/900,063C

CRF Edit Date: 4/17/06
Edited by: ME

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

___ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

✓
___ Other: Seq 14-15 - changed "amino acid" to "nucleotide"
in 2237 response



IFW16

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 12:30:05

Input Set : A:\PTO.CHG.RAW

Output Set: N:\CRF4\04172006\I900063C.raw

```

1 <110> APPLICANT: Rothschild, Max F.
2      Vincent, Amy L.
3      Tuggle, Christopher K.
4 <120> TITLE OF INVENTION: PROLACTIN RECEPTOR GENE AS A GENETIC MARKER FOR INCREASED
LITTER SIZE IN
5      ANIMALS
6 <130> FILE REFERENCE: P02285US5
C--> 7 <140> CURRENT APPLICATION NUMBER: US/09/900,063C
8 <141> CURRENT FILING DATE: 2001-07-06
9 <150> PRIOR APPLICATION NUMBER: US 08/812,208
10 <151> PRIOR FILING DATE: 1997-03-06
11 <150> PRIOR APPLICATION NUMBER: US 08/742,805
12 <151> PRIOR FILING DATE: 1996-11-01
13 <150> PRIOR APPLICATION NUMBER: US 60/022,180
14 <151> PRIOR FILING DATE: 1996-07-19
15 <160> NUMBER OF SEQ ID NOS: 18
16 <170> SOFTWARE: PatentIn version 3.1
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 20
20 <212> TYPE: DNA
21 <213> ORGANISM: Porcine
22 <400> SEQUENCE: 1
23      cccaaaacag caggagaacg                                20
25 <210> SEQ ID NO: 2
26 <211> LENGTH: 20
27 <212> TYPE: DNA
28 <213> ORGANISM: Porcine
29 <400> SEQUENCE: 2
30      ggcaagtggg tgaaaatgga                                20
32 <210> SEQ ID NO: 3
33 <211> LENGTH: 492
34 <212> TYPE: DNA
35 <213> ORGANISM: Porcine
36 <220> FEATURE:
37 <221> NAME/KEY: allele
38 <222> LOCATION: (240)..(240)
39 <223> OTHER INFORMATION: G/A polymorphic site
40 <400> SEQUENCE: 3
41      aagtcaacaa agatggagca ctggcggttg tcccaaaaca gcaggagaac ggcgaccggc      60
42      cggagaaggc tggcgcccct gaaaccagca aggaatacgc ccaggtgtcc cgggtgatgg      120
43      ataaccacat cctggtgtta gtgcaggatc cgcgagctcg aaacgtggct ccgtttgaag      180
44      aaccaaccaa ggagaccccc ccatcccggc cgcagaatcc agctgcgaaa gacctggccg      240
45      gtttcaccac ggccccgggc cactgcagac acccgctggg tgggctggat tacctcgatc      300
46      ccgcaggctt tatgcactcc ttctcagtga agcttggttc atgggatgat gggttacaag      360

```

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 12:30:05

Input Set : A:\PTO.CHG.RAW

Output Set: N:\CRF4\04172006\I900063C.raw

```

47      gtgggggtttt tttcagggtcg cactacgtga aatgcactct accagagaaa gctcgaaaat      420
48      gggggttagaa tgacactacc cagactcaca gttcactcct cttcatgctc cattttcaac      480
49      cacttgccctc tt                                     492
51 <210> SEQ ID NO: 4
52 <211> LENGTH: 20
53 <212> TYPE: DNA
54 <213> ORGANISM: Unknown
55 <220> FEATURE:
56 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor w
57      ere used to design the degenerate primer
58 <220> FEATURE:
59 <221> NAME/KEY: misc_difference
60 <222> LOCATION: (13)..(13)
61 <223> OTHER INFORMATION: C/T
62 <400> SEQUENCE: 4
63      tcacaagggtc aacaaagatg                                     20
65 <210> SEQ ID NO: 5
66 <211> LENGTH: 20
67 <212> TYPE: DNA
68 <213> ORGANISM: Unknown
69 <220> FEATURE:
70 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor w
71      ere used to design the degenerate primer
72 <220> FEATURE:
73 <221> NAME/KEY: misc_difference
74 <222> LOCATION: (3)..(3)
75 <223> OTHER INFORMATION: G/A
76 <220> FEATURE:
77 <221> NAME/KEY: misc_difference
78 <222> LOCATION: (9)..(9)
79 <223> OTHER INFORMATION: G/A
80 <220> FEATURE:
81 <221> NAME/KEY: misc_difference
82 <222> LOCATION: (16)..(16)
83 <223> OTHER INFORMATION: G/A
84 <400> SEQUENCE: 5
85      tggagaaaga ggcaagtgg                                     20
87 <210> SEQ ID NO: 6
88 <211> LENGTH: 20
89 <212> TYPE: DNA
90 <213> ORGANISM: Porcine
91 <400> SEQUENCE: 6
92      cggccgcaga atcctgctgc                                     20
94 <210> SEQ ID NO: 7
95 <211> LENGTH: 24
96 <212> TYPE: DNA
97 <213> ORGANISM: Porcine
98 <400> SEQUENCE: 7
99      accccacctt gtaacccatc atcc                                     24

```

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 12:30:05

Input Set : A:\PTO.CHG.RAW

Output Set: N:\CRF4\04172006\I900063C.raw

```

101 <210> SEQ ID NO: 8
102 <211> LENGTH: 18
103 <212> TYPE: DNA
104 <213> ORGANISM: Porcine
105 <400> SEQUENCE: 8
106      caaggtggga acatgagt                                18
108 <210> SEQ ID NO: 9
109 <211> LENGTH: 20
110 <212> TYPE: DNA
111 <213> ORGANISM: Porcine
112 <400> SEQUENCE: 9
113      aatcctttta tttttggccc                                20
115 <210> SEQ ID NO: 10
116 <211> LENGTH: 20
117 <212> TYPE: DNA
118 <213> ORGANISM: Porcine
119 <400> SEQUENCE: 10
120      gattattgtc tgggcagtgg                                20
122 <210> SEQ ID NO: 11
123 <211> LENGTH: 20
124 <212> TYPE: DNA
125 <213> ORGANISM: Porcine
126 <400> SEQUENCE: 11
127      aatcctttta tttttggccc                                20
129 <210> SEQ ID NO: 12
130 <211> LENGTH: 20
131 <212> TYPE: DNA
132 <213> ORGANISM: Porcine
133 <400> SEQUENCE: 12
134      gattattgtc tgggcagtgg                                20
136 <210> SEQ ID NO: 13
137 <211> LENGTH: 23
138 <212> TYPE: DNA
139 <213> ORGANISM: Porcine
140 <400> SEQUENCE: 13
141      ctatttcaca aaaactgcgc tac                            23
143 <210> SEQ ID NO: 14
144 <211> LENGTH: 566
145 <212> TYPE: DNA
146 <213> ORGANISM: Porcine
147 <220> FEATURE:
148 <221> NAME/KEY: misc_feature
149 <222> LOCATION: (36)..(36)
150 <223> OTHER INFORMATION: n = unknown at nucleotide position 36
151 <400> SEQUENCE: 14
W--> 152      gattattgtc tgggcagtgg tcttctctgt ctatcnaccc ccctcccatt catggctctc      60
153      aggggtataat ggccaaaaaa aagacaagac aaaaatgatg gaaacctaca gataattyaa      120
154      gcacctcatt ttgccattag ctgcattagc cataaaaaaa aaaaaaaaaa ctttttctca      180
155      gtgctagaaa aaacagaat agactcattt gaaactgata ttctctctac caaagggagt      240

```

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 12:30:05

Input Set : A:\PTO.CHG.RAW

Output Set: N:\CRF4\04172006\I900063C.raw

```

156      agcgcagttg tgaaatagta aacgtctgac aagaacagca aataatccca ctagtaattt      300
157      cagaatccgc ctctcaatt agccagaatt cactgtgatg ctggcctcta taattattat      360
158      ttgtcttcac cactgattag tttcacatca tgaaaattgc atgtcattta gtttcacrt      420
159      gcctcagaac caaccctaatt tcctacctgc catatccctg tagcagctat tcgaagatca      480
160      caaggtggga acatgtgtya tttatctttt ctcttacatt attttagagc atgggtggcct      540
161      gcatccgggc caaaaataaa aggatt      566
163 <210> SEQ ID NO: 15
164 <211> LENGTH: 518
165 <212> TYPE: DNA
166 <213> ORGANISM: Porcine
167 <220> FEATURE:
168 <221> NAME/KEY: misc_feature
169 <222> LOCATION: (49)..(49)
170 <223> OTHER INFORMATION: n = unknown in nucleotide position 49
171 <220> FEATURE:
172 <221> NAME/KEY: misc_feature
173 <222> LOCATION: (67)..(67)
174 <223> OTHER INFORMATION: n = unknown in nucleotide position 67
175 <400> SEQUENCE: 15
W--> 176      gtacacacac acacacacac acacacacac acacaccacc gttaagctnt ctttctgaat      60
W--> 177      catgccnacc cgagggccac ccatagagga gtgtgggtgga ggggtgccttg gcacttctga      120
178      gccctgcac cctacaccca ctagecctcaa gatgtcatcc ctgccctggc cccaccccat      180
179      ctgcttctgt caccagcaga atgggtccagt cattgagcgg accttcatat tgactccagt      240
180      ggcttctggc tttttctagg acagtcacct ccgggaaaac ctgagatctt caaatgtcgt      300
181      tctcccgaag aggaacatt cgctgctgg tggaagccgg gggcggatgg aggacttct      360
182      accaactaga cgctgactta ccacaaggaa gggtgaagcat tcgcgtgtct cccaacaaac      420
183      cacacgagtg ttctctctct gtgggccaga ggaacactgc ttctgggtta gaactgcctc      480
184      gctttggagt tcccgatcat gctcagtggt aacgaatc      518
186 <210> SEQ ID NO: 16
187 <211> LENGTH: 133
188 <212> TYPE: DNA
189 <213> ORGANISM: Homo sapiens
190 <400> SEQUENCE: 16
191      gacagttacc tcctggaaaa cctgagatct ttaaagtgcg ttctcccaat aaggaaacat      60
192      tcacctgctg gtggaggcct gggacagatg gaggacttcc taccaattat tcaactgactt      120
193      accacaggga agg      133
195 <210> SEQ ID NO: 17
196 <211> LENGTH: 53
197 <212> TYPE: PRT
198 <213> ORGANISM: Homo sapiens
199 <400> SEQUENCE: 17
200      Gly Gln Leu Pro Pro Gly Lys Pro Glu Ile Phe Lys Ser Pro Phe Cys
201      1          5          10          15
202      Arg Ser Pro Asn Lys Glu Thr Phe Thr Glu Ala Arg Pro Gly Thr Asp
203      20          25          30
204      Gly Gly Leu Pro Thr Asn Lys Pro Ala Asn Tyr Ser Leu Thr Tyr His
205      35          40          45
206      Arg Glu Gly Thr Lys
207      50

```

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 12:30:05

Input Set : A:\PTO.CHG.RAW

Output Set: N:\CRF4\04172006\I900063C.raw

209 <210> SEQ ID NO: 18

210 <211> LENGTH: 132

211 <212> TYPE: DNA

212 <213> ORGANISM: Porcine

213 <400> SEQUENCE: 18

214	acagtcacct ccgggaaaac ctgagatctt caaatgtcgt tctcccgaaa aggaaacatt	60
215	cgcttgctgg tggaagccgg gggcggatgg aggacttcct accaactaga cgctgactta	120
216	ccacaaggaa gg	132

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/900,063C

DATE: 04/17/2006
TIME: 12:30:06

Input Set : A:\PTO.CHG.RAW
Output Set: N:\CRF4\04172006\I900063C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:14; N Pos. 36
Seq#:15; N Pos. 49,67

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 4
Seq#:4; Line(s) 56
Seq#:5; Line(s) 70

VERIFICATION SUMMARY

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 12:30:06

Input Set : A:\PTO.CHG.RAW

Output Set: N:\CRF4\04172006\I900063C.raw

L:7 M:270 C: Current Application Number differs, Wrong Format

L:152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0

L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0

L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:60

Raw Sequence Listing before editing (for reference only)



IFW16

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 10:33:28

Input Set : N:\SMITH\PTO.TS.txt

Output Set: N:\CRF4\04132006\I900063C.raw

5 <110> APPLICANT: Rothschild, Max F.
 7 Vincent, Amy L.
 9 Tuggle, Christopher K.
 13 <120> TITLE OF INVENTION: PROLACTIN RECEPTOR GENE AS A GENETIC MARKER FOR INCREASED
 LITTER SIZE IN
 14 ANIMALS
 18 <130> FILE REFERENCE: P02285US5
 22 <140> CURRENT APPLICATION NUMBER: US 09/900,063C
 24 <141> CURRENT FILING DATE: 2001-07-06
 28 <150> PRIOR APPLICATION NUMBER: US 08/812,208
 30 <151> PRIOR FILING DATE: 1997-03-06
 34 <150> PRIOR APPLICATION NUMBER: US 08/742,805
 36 <151> PRIOR FILING DATE: 1996-11-01
 40 <150> PRIOR APPLICATION NUMBER: US 60/022,180
 42 <151> PRIOR FILING DATE: 1996-07-19
 46 <160> NUMBER OF SEQ ID NOS: 18
 50 <170> SOFTWARE: PatentIn version 3.1
 54 <210> SEQ ID NO: 1
 56 <211> LENGTH: 20
 58 <212> TYPE: DNA
 60 <213> ORGANISM: Porcine
 64 <400> SEQUENCE: 1
 65 cccaaaacag caggagaacg 20
 68 <210> SEQ ID NO: 2
 70 <211> LENGTH: 20
 72 <212> TYPE: DNA
 74 <213> ORGANISM: Porcine
 78 <400> SEQUENCE: 2
 79 ggcaagtggg tgaaaatgga 20
 82 <210> SEQ ID NO: 3
 84 <211> LENGTH: 492
 86 <212> TYPE: DNA
 88 <213> ORGANISM: Porcine
 92 <220> FEATURE:
 94 <221> NAME/KEY: allele
 96 <222> LOCATION: (240)..(240)
 98 <223> OTHER INFORMATION: G/A polymorphic site
 102 <400> SEQUENCE: 3
 103 aagtcaacaa agatggagca ctggcggttg tcccaaaaca gcaggagaac ggcgaccggc 60
 105 cggagaaggc tggcgccccct gaaaccagca aggaatacgc ccagggtgtcc cgggtgatgg 120
 107 ataaccacat cctggtgtta gtgcaggatc cgcgagctcg aaacgtggct ccgtttgaag 180
 109 aaccaaccaa ggagacccccg ccatccccggc cgcagaatcc agctgcgaaa gacctggccg 240
 111 gcttcaccac ggccccgggc cactgcagac acccgctggg tgggctggat tacctcgatc 300
 113 ccgcaggctt tatgcactcc tttcagtggg agcttggttc atgggatgat gggttacaag 360

pp 3-4
**Does Not Comply
 Corrected Diskette Needed**

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 10:33:28

Input Set : N:\SMITH\PTO.TS.txt

Output Set: N:\CRF4\04132006\I900063C.raw

```

115 gtgggggtttt tttcaggctcg cactacgtga aatgcactct accagagaaa gctcgaaaat      420
117 gggggttagaa tgacactacc cagactcaca gttcactcct cttcatgctc cattttcaac      480
119 cacttgcctc tt                                                              492
122 <210> SEQ ID NO: 4
124 <211> LENGTH: 20
126 <212> TYPE: DNA
128 <213> ORGANISM: Unknown
132 <220> FEATURE:
134 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor w
135     ere used to design the degenerate primer
137 <220> FEATURE:
139 <221> NAME/KEY: misc_difference
141 <222> LOCATION: (13)..(13)
143 <223> OTHER INFORMATION: C/T
147 <400> SEQUENCE: 4
148 tcacaaggtc aacaaagatg                                                    20
151 <210> SEQ ID NO: 5
153 <211> LENGTH: 20
155 <212> TYPE: DNA
157 <213> ORGANISM: Unknown
161 <220> FEATURE:
163 <223> OTHER INFORMATION: Human and rabbit cDNA sequences encoding the prolactin
receptor w
164     ere used to design the degenerate primer
166 <220> FEATURE:
168 <221> NAME/KEY: misc_difference
170 <222> LOCATION: (3)..(3)
172 <223> OTHER INFORMATION: G/A
176 <220> FEATURE:
178 <221> NAME/KEY: misc_difference
180 <222> LOCATION: (9)..(9)
182 <223> OTHER INFORMATION: G/A
186 <220> FEATURE:
188 <221> NAME/KEY: misc_difference
190 <222> LOCATION: (16)..(16)
192 <223> OTHER INFORMATION: G/A
196 <400> SEQUENCE: 5
197 tggagaaaaga ggcaagtgggt                                                    20
200 <210> SEQ ID NO: 6
202 <211> LENGTH: 20
204 <212> TYPE: DNA
206 <213> ORGANISM: Porcine
210 <400> SEQUENCE: 6
211 cggccgcaga atcctgctgc                                                    20
214 <210> SEQ ID NO: 7
216 <211> LENGTH: 24
218 <212> TYPE: DNA
220 <213> ORGANISM: Porcine
224 <400> SEQUENCE: 7
225 accccacctt gtaacccatc atcc                                                    24

```

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 10:33:28

Input Set : N:\SMITH\PTO.TS.txt

Output Set: N:\CRF4\04132006\I900063C.raw

```

228 <210> SEQ ID NO: 8
230 <211> LENGTH: 18
232 <212> TYPE: DNA
234 <213> ORGANISM: Porcine
238 <400> SEQUENCE: 8
239 caaggtggga acatgagt 18
242 <210> SEQ ID NO: 9
244 <211> LENGTH: 20
246 <212> TYPE: DNA
248 <213> ORGANISM: Porcine
252 <400> SEQUENCE: 9
253 aatcctttta tttttggccc 20
256 <210> SEQ ID NO: 10
258 <211> LENGTH: 20
260 <212> TYPE: DNA
262 <213> ORGANISM: Porcine
266 <400> SEQUENCE: 10
267 gattattgtc tgggcagtgg 20
270 <210> SEQ ID NO: 11
272 <211> LENGTH: 20
274 <212> TYPE: DNA
276 <213> ORGANISM: Porcine
280 <400> SEQUENCE: 11
281 aatcctttta tttttggccc 20
284 <210> SEQ ID NO: 12
286 <211> LENGTH: 20
288 <212> TYPE: DNA
290 <213> ORGANISM: Porcine
294 <400> SEQUENCE: 12
295 gattattgtc tgggcagtgg 20
298 <210> SEQ ID NO: 13
300 <211> LENGTH: 23
302 <212> TYPE: DNA
304 <213> ORGANISM: Porcine
308 <400> SEQUENCE: 13
309 ctatttcaca aaaactgcgc tac 23
312 <210> SEQ ID NO: 14
314 <211> LENGTH: 566
316 <212> TYPE: DNA
318 <213> ORGANISM: Porcine
322 <220> FEATURE:
324 <221> NAME/KEY: misc_feature
326 <222> LOCATION: (36)..(36)
328 <223> OTHER INFORMATION: n = unknown at amino acid position 36
332 <400> SEQUENCE: 14
W--> 333 gattattgtc tgggcagtgg tcttctctgt ctatcnaccc cctcccatt catggctctc 60
335 aggggtataat ggccaaaaaa aagacaagac aaaaatgatg gaaacctaca gataattyaa 120
337 gcacctcatt ttgccattag ctgcattagc cataaaaaaa aaaaaaaaaa ccttttctca 180
339 gtgctagaaa aaaacagaat agactcattt gaaactgata ttctctctac caaagggagt 240

```

? This is not an amino acid sequence.
 replace w/ "nucleotide"

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 10:33:28

Input Set : N:\SMITH\PTO.TS.txt

Output Set: N:\CRF4\04132006\I900063C.raw

341 agcgagcttg tgaaatagta aacgtctgac aagaacagca aataatccca ctagtaattt 300
 343 cagaatccgc ctctcaatt agccagaatt cactgtgatg ctggcctcta taattattat 360
 345 ttgtcttcac cactgattag tttcacatca tgaaaattgc atgtcattta gtttcacrta 420
 347 gcctcagaac caaccctaatt tcctacctgc catatccctg tagcagctat tcgaagatca 480
 349 caaggtggga acatgtgtya tttatctttt ctcttacatt atttttagagc atgggtggcct 540
 351 gcatccgggc caaaaataaa aggatt 566

354 <210> SEQ ID NO: 15

356 <211> LENGTH: 518

358 <212> TYPE: DNA

360 <213> ORGANISM: Porcine

364 <220> FEATURE:

366 <221> NAME/KEY: misc_feature

368 <222> LOCATION: (49)..(49)

370 <223> OTHER INFORMATION: n = unknown in amino acid position 49

374 <220> FEATURE:

376 <221> NAME/KEY: misc_feature

378 <222> LOCATION: (67)..(67)

380 <223> OTHER INFORMATION: n = unknown in amino acid position 67

384 <400> SEQUENCE: 15

W--> 385 gtacacacac acacacacac acacacacac acacaccacc gttaagctnt ctttctgaat 60
 W--> 387 catgccnacc cgagggccac ccatagagga gtgtgggtgga ggggtgccttg gcacttctga 120
 389 gccctgcatc cctacaccca ctacgctcaa gatgtcatcc ctgccctggc cccaccccat 180
 391 ctgcttctgt caccagcaga atggtccagt cattgagcgg accttcatat tgactccagt 240
 393 ggcttctggc tttttctagg acagtcacct ccgggaaaac ctgagatctt caaatgtcgt 300
 395 tctcccgaag aggaaacatt cgctgctgg tggaagccgg gggcggatgg aggacttctt 360
 397 accaactaga cgctgactta ccacaaggaa gggtaagcat tcgcgtgtct cccaacaaac 420
 399 cacacgagtg ttctctctct gtgggccaga ggaacactgc ttctgggtta gaactgcctc 480
 401 gctttggagt tcccgtcatg gctcagtgg aacgaatc 518

404 <210> SEQ ID NO: 16

406 <211> LENGTH: 133

408 <212> TYPE: DNA

410 <213> ORGANISM: Homo sapiens

414 <400> SEQUENCE: 16

415 gacagttacc tcttggaata cctgagatct ttaaatgtcg ttctcccaat aaggaaacat 60
 417 tcacctgctg gtggaggcct gggacagatg gaggacttcc taccaattat tcaactgactt 120
 419 accacagggga agg 133

422 <210> SEQ ID NO: 17

424 <211> LENGTH: 53

426 <212> TYPE: PRT

428 <213> ORGANISM: Homo sapiens

432 <400> SEQUENCE: 17

434 Gly Gln Leu Pro Pro Gly Lys Pro Glu Ile Phe Lys Ser Pro Phe Cys
 435 1 5 10 15
 438 Arg Ser Pro Asn Lys Glu Thr Phe Thr Glu Ala Arg Pro Gly Thr Asp
 439 20 25 30
 442 Gly Gly Leu Pro Thr Asn Lys Pro Ala Asn Tyr Ser Leu Thr Tyr His
 443 35 40 45
 446 Arg Glu Gly Thr Lys
 447 50

*This is not an amino acid sequence
 replace with
 "nucleotide"*

RAW SEQUENCE LISTING

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 10:33:28

Input Set : N:\SMITH\PTO.TS.txt

Output Set: N:\CRF4\04132006\I900063C.raw

450 <210> SEQ ID NO: 18

452 <211> LENGTH: 132

454 <212> TYPE: DNA

456 <213> ORGANISM: Porcine

460 <400> SEQUENCE: 18

461 acagtcacct ccgggaaaac ctgagatctt caaatgtcgt tctcccgaaa aggaaacatt 60

463 cgcctgctgg tggaagccgg gggcggatgg aggacttcct accaactaga cgctgactta 120

465 ccacaaggaa gg 132

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 04/17/2006
PATENT APPLICATION: US/09/900,063C TIME: 10:33:29

Input Set : N:\SMITH\PTO.TS.txt
Output Set: N:\CRF4\04132006\I900063C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:14; N Pos. 36
Seq#:15; N Pos. 49,67

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 13

VERIFICATION SUMMARY

DATE: 04/17/2006

PATENT APPLICATION: US/09/900,063C

TIME: 10:33:29

Input Set : N:\SMITH\PTO.TS.txt

Output Set: N:\CRF4\04132006\I900063C.raw

L:333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:60